

Anti-POLR3C Antibody

Rabbit polyclonal antibody to POLR3C

Catalog # AP59802

Product Information

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|-------------------|------------------------|
| Application | WB, IP |
| Primary Accession | Q9BUI4 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 60612 |

Additional Information

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| Gene ID | 10623 |
| Other Names | DNA-directed RNA polymerase III subunit RPC3; RNA polymerase III subunit C3; DNA-directed RNA polymerase III subunit C; RNA polymerase III 62 kDa subunit; RPC62 |
| Target/Specificity | Recognizes endogenous levels of POLR3C protein. |
| Dilution | WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IP~~N/A |
| Format | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide. |
| Storage | Store at -20 °C.Stable for 12 months from date of receipt |

Protein Information

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| Name | POLR3C (HGNC:30076) |
| Function | DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates (PubMed: 20413673 , PubMed: 33558764 , PubMed: 33558766 , PubMed: 34675218 , PubMed: 35637192). Specific peripheric component of RNA polymerase III (Pol III) which synthesizes small non-coding RNAs including 5S rRNA, snRNAs, tRNAs and miRNAs from at least 500 distinct genomic loci (PubMed: 20413673 , PubMed: 33558764 , PubMed: 33558766 , PubMed: 35637192). Part of POLR3C/RPC3-POLR3F/RPC6-POLR3G/RPC7 heterotrimer, coordinates the dynamics of Pol III stalk and clamp modules during the transition from apo to elongation state (PubMed: 33558764 , PubMed: 33558766). Pol III plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as a nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase |

III transcripts, such as Epstein-Barr virus-encoded RNAs (EBERs) induce type I interferon and NF-kappa-B through the RIG-I pathway (PubMed:[19609254](#), PubMed:[19631370](#)). Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner (PubMed:[21358628](#)).

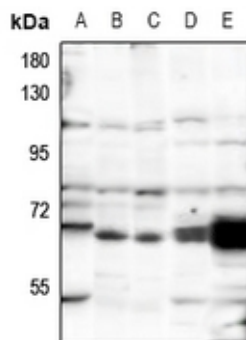
Cellular Location

Nucleus.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human POLR3C. The exact sequence is proprietary.

Images



Western blot analysis of POLR3C expression in CT26 (A), PC12 (B), Hela (C), COS7 (D), A549 (E) whole cell lysates.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.